



2012-1

Air Force Leadership Study

The Need for Deliberate Development

Dr. Karen Currie — Team Leader
Colonel, USAF, Retired

John Conway
Colonel, USAF, Retired

Scott Johnson
Colonel, USAF, Retired

Dr. Brian Landry
Lieutenant Colonel, USAF

Dr. Adam Lowther



AIR FORCE RESEARCH INSTITUTE PAPERS

Report Documentation Page			Form Approved OMB No. 0704-0188		
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE FEB 2012		2. REPORT TYPE		3. DATES COVERED 00-00-2012 to 00-00-2012	
4. TITLE AND SUBTITLE Air Force Leadership Study: The Need for Deliberate Development			5a. CONTRACT NUMBER		
			5b. GRANT NUMBER		
			5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)			5d. PROJECT NUMBER		
			5e. TASK NUMBER		
			5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Air University, Air Force Research Institute, Maxwell AFB, AL, 36112-6026			8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSOR/MONITOR'S ACRONYM(S)		
			11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 77	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

AIR UNIVERSITY
AIR FORCE RESEARCH INSTITUTE



Air Force Leadership Study
The Need for Deliberate Development

DR. KAREN CURRIE — TEAM LEADER
Colonel, USAF, Retired

JOHN CONWAY
Colonel, USAF, Retired

SCOTT JOHNSON
Colonel, USAF, Retired

DR. BRIAN LANDRY
Lieutenant Colonel, USAF

DR. ADAM LOWTHER

Research Paper 2012-1

Air University Press
Air Force Research Institute
Maxwell Air Force Base, Alabama 36112-6026

February 2012

Disclaimer

Opinions, conclusions, and recommendations expressed or implied within are solely those of the authors and do not necessarily represent the views of the Air Force Research Institute, Air University, the United States Air Force, the Department of Defense, or any other US government agency. Cleared for public release: distribution unlimited.

Air Force Research Institute papers and other scholarly Air University studies provide independent analysis and constructive discussion on issues important to Air Force commanders, staffs, and other decision makers. Each paper can also be a valuable tool for defining further research. These studies are available electronically or in print via the AU Press website at <http://aupress.au.af.mil/papers.asp>.

Contents

Memorandum for Record from the Chief of Staff of the Air Force to AFRI	<i>v</i>
Foreword	<i>vii</i>
About the Authors	<i>ix</i>
Executive Summary	<i>xi</i>
Recommendations	<i>xv</i>
1 Introduction	1
2 Leadership Concepts	11
3 The Deliberate Development of Air Force Officers	21
4 Recommendations	35
5 Conclusions	45
Appendix Air Force Negotiation Center of Excellence Concept Paper for General Officer Negotiation Skills	49
Abbreviations and Acronyms	55

Memorandum for Record from the Chief of Staff of the Air Force to AFRI



DEPARTMENT OF THE AIR FORCE
OFFICE OF THE CHIEF OF STAFF
UNITED STATES AIR FORCE
WASHINGTON DC 20330

NOV 23 2010

MEMORANDUM FOR THE AIR FORCE RESEARCH INSTITUTE

FROM: HQ USAF/CC
1670 Air Force Pentagon
Washington, DC 20330-1670


SUBJECT: AFRI CSAF Research Priority for FY11

The topics described below represent my FY11 research priorities for AFRI. Please approach these subjects from a holistic and balanced perspective, avoid parochial or functional biases, consider "third-rail" sensitive issues as necessary, and ensure that the studies examine implications for increased risk and provide risk mitigation strategies where appropriate.

Acquisition Requirements Reform. Review the Air Force requirements process to improve the acquisition system and better meet Combatant Commanders' needs. Review how to instill discipline in the process, which will help keep requirements from multiplying. Finally, while OSD and other organizations focus primarily on reforming acquisition legislation, this study should recommend acquisition reform strategies that are within the Air Force's control.

Leadership Development. Review current Air Force leader development. Address experience, training, and education, starting with the Developing of Aerospace Leaders (DAL) initiative, and taking it forward. Generational gaps require a fresh look where changes in learning styles and technologies may point to new ways to develop Airmen. Focus on leader development that prepares Airmen of all ranks for the evolving security challenges in the Joint and Service environments.

Airpower Command and Control. Review airpower command and control changes that are required in Air Force doctrine and organizational structures, to ensure success in uncertain and dynamic future scenarios. As always, the focus is on delivering the right effects at the right place and right time. Moreover, any proposed structure should be flexible for success across the full spectrum of warfare.


NORTON A. SCHWARTZ
General, USAF
Chief of Staff

Foreword

Americans tend to regard military leaders, especially military officers, as role models. More than a half century ago, Samuel P. Huntington wrote in *The Soldier and the State*, “Yet today America can learn more from West Point than West Point from America.” For the sixth year in a row, the Center for Public Leadership at the Harvard Kennedy School, in its *National Leadership Index 2010*, showed that “military leadership continues to inspire the most confidence out of all 13 sectors [of leadership in society surveyed].” Yet great military leaders are an enigmatic combination of nature and nurture.

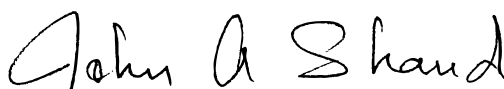
The United States Air Force fully recognizes the critical role it must play in creating military leaders, and it devotes significant time and resources to recruiting and developing its future leaders based upon the premise that the personal leadership skills of any Air Force member can be improved through training, education, and experience. Air Force officers receive intensive leadership training and education in precommissioning sources as well as in the three levels of professional military education. But the leadership development programs in place today will not suffice to produce the senior leaders we need to succeed in the challenging, chaotic, resource-constrained future environment. To answer this need, the *Air Force Leadership Study* team provides recommendations to enhance the development of senior leaders for the next-generation Air Force.

After describing the type of visionary senior officers needed to lead the Air Force of the future, the study team recommends the identification of “high potential” officers upon selection for field-grade rank. This special designation allows the Air Force to focus education and assignment opportunities on those officers most likely to attain flag rank and senior joint billets. Subsequent recommendations are designed to provide additional leadership development opportunities for officers after they attain flag rank. These initiatives emphasize the focus we must place on developing and continuing leadership education for officers at every stage in their careers. The future strategic environment demands nothing less.

The changes in personnel and education policy recommended by the study team are revolutionary, not evolutionary. Many

will disagree with these recommendations, and I challenge the reader to study these issues and think critically about the best way to prepare today's captains to be the great combatant commanders of tomorrow. To quote from the study, "Air Force leaders must generate ideas, foster change, search for unique solutions, and reject the status quo."

The challenges of the future demand deliberate development of senior leaders. I recommend your serious consideration of the recommendations presented in this study.

A handwritten signature in black ink that reads "John A. Shaud". The signature is written in a cursive, flowing style with a large initial 'J' and 'S'.

Gen John A. Shaud, USAF Retired, PhD
Director, Air Force Research Institute

About the Authors

Col John L. Conway III, USAF, retired, is a military defense analyst for the Air Force Research Institute (AFRI) and has served in numerous intelligence assignments supporting reconnaissance, fighter, airlift, special operations, counter-drug, and space and missile missions. He held senior assignments at Headquarters Air Intelligence Agency, the North American Aerospace Defense Command, and the National Security Agency.

Col Karen W. Currie, USAF, retired, PhD, is a military defense analyst for AFRI. During her 28 years of active duty with the USAF, she taught at the Air Force Institute of Technology, the Defense Institute of Security Assistance Management, and the Air War College and commanded the Air Force Logistics Management Agency.

Col Scott Johnson, USAF, retired, is a military defense analyst for AFRI. He has served as an RF-4C weapon systems officer, a squadron and wing commander, a NATO plans officer, a MAJCOM supply director, and an Air War College department chair. His work has appeared in the *Air and Space Power Journal* (Chinese edition); AFDD 1-1, *Leadership and Force Development*; and various AFRI publications.

Lt Col Brian W. Landry, USAF, PhD, is the commander of Air Force ROTC Detachment 012 at Samford University, Birmingham, Alabama. For the previous 10 years, Colonel Landry served Air University in various positions, including faculty member at Air Command and Staff College and associate research analyst at AFRI. His research interests include the development of servant leaders and the effects of culture on leadership development and behavior. An example of his work is "Servant Leadership, Building of Community, and POWs," *International Journal of Servant Leadership* (November 2008).

Adam B. Lowther, PhD, is a military defense analyst for AFRI. He is the author of *Americans and Asymmetric Conflict* (Praeger, 2007) and editor of *Terrorism's Unanswered Questions* (Praeger, 2009). His writing has also appeared in academic journals and major newspapers.

Executive Summary

On 23 November 2010, the Air Force chief of staff tasked the Air Force Research Institute (AFRI) to review current Air Force leader development, focusing on the preparation of Airmen for the evolving security challenges in the joint and service environments. This study identifies the characteristics desired for successful senior leaders over the next generation, reviews current Air Force officer development, and recommends changes as indicated to the current officer development process.

To inform themselves on these issues, the AFRI research team members examined the literature on senior leadership in both military and civilian contexts. The team also interviewed more than 35 active-duty and retired senior leaders and subject-matter experts on the topics of Air Force officer development (training, education, and experience), senior leader development, and Air Force leadership and personnel initiatives. Correlating these leadership issues and requirements with aspects of the future national security environment, the research team synthesized various perspectives on senior leadership.

This study is designed to improve the current Air Force process of leader development. While today's processes have been successful, changes will be required in the future. In conducting this study, the research team identified desired leadership characteristics and analyzed them against the projected future environment. The next generation of Air Force leaders must expect to deal with a strategic environment characterized by increasing volatility, uncertainty, complexity, and ambiguity (VUCA). Spiraling civil unrest, humanitarian crises, and the impact of instant communications and networking tools will combine to create unpredictable, volatile circumstances. The AFRI research team predicts that in many future cases the US government will need the Air Force to provide strategic solutions to problems currently unknown. Air Force leaders using "off the shelf" solutions will have difficulty succeeding in this more intense environment.

After describing potential future challenges for Air Force leaders, the study team reviewed leadership development both in and out of the Air Force. Analyzing academic, practitioner, and

military perspectives on leadership enabled the team to generate a set of desired characteristics for future senior leaders.

The Air Force will require visionary senior leaders to deal with VUCA environments. These senior leaders must envision desirable future organizations, share those visions while gaining input from their teams, and guide the implementation. Senior leaders must quickly sift through large amounts of data and make swift, confident decisions; they must step back and view problems with a flexible perspective; they must be broadly knowledgeable and experienced; and they must be emotionally resilient and aware of their own strengths and weaknesses. These competencies are intellectually grounded by the leaders' dedication to lifelong learning.

The senior leaders' willingness to learn supports their commitment to team building and networking. Successful senior leaders are always interested in learning from others. Senior leaders constantly work as facilitators and negotiators across a broad range of organizations. They must develop political savvy through a variety of assignments exposing them to other services as well as to joint, federal, and international organizations. From their experience and education, they become sensitive to the various organizations' cultural norms as they meld them into functional alliances. Senior leaders are also sensitive to their people's emotional concerns and can provide the necessary "resiliency" resources.

Successful leaders already live the Air Force's basic leadership characteristics, including its core values. As they reach senior rank, they continue to refine their strategic communication skills, emphasizing information sharing and open dialogue. They take a creative approach to developing the next generation of senior leaders through mentoring and guiding their juniors. Senior leaders must maintain an enterprise perspective when making tough decisions on resource allocations and must link these decisions back to their organization's and team's strategic visions.

The current Air Force process of developing its future leaders is well established through a process of training, education, and experience. A few changes to this process are necessary to create a cadre of future leaders to meet the VUCA operating environment while making the best use of scarce resources.

The Air Force must make these changes now so that today's junior officers will get the chance to develop the needed characteristics of tomorrow's senior leaders.

Several recommendations are designed to enhance development opportunities for senior leaders. Short courses for senior officers are listed in the *Senior Leader Development Program Portfolio* published by AF/A1D. Senior officer management offices should make this portfolio available to eligible officers so they can take an active role in planning their development opportunities. Because negotiating and coalition-building across organization boundaries are so critical for the future leader, senior officers should take part in negotiation training with role-playing exercises. To provide new senior officers with the best possible foundation for future success in their assignments, the Air Force should ensure that each senior officer receives a 360-degree leadership assessment and the on-call services of an executive coach. These initiatives will allow the new senior officers to refine their leadership skills in a confidential and professional environment according to their own schedules. Finally, the proposed executive preflight seminar will enable participating officers to become more effective in their new positions quickly, saving time for all involved.

Three recommendations are designed to provide officers with more developmental opportunities across Air Force domains and joint organizations. Assigning officers in more than one operational domain and planning for two joint assignments in a career will produce officers who are more qualified for positions of senior leadership in both Air Force and joint organizations. Designating wing commander-equivalent positions will provide more officers the opportunity to demonstrate their potential for greater responsibilities and provide a larger pool of candidates for special assignments and promotion.

Formal designation of high-potential officers will facilitate tracking and assignment of those officers deemed most likely to achieve senior officer rank. Air Force senior leaders will be able to view the total cadre of high-potential officers across the range of Air Force specialty codes and improve the development and utilization of the high-potential officers. Also, formal tracking of these officers in the personnel system will enable Air

Force leadership to ensure these officers receive the cross-domain assignments necessary for senior officer candidates.

The Air Force can enhance the critical-thinking skills of its officers through a combination of formal study, short courses, self-study, and mentoring. Through study at civilian institutions, officers will encounter instructors and other students who challenge their beliefs and assumptions. Studying topics related to national security strategy at nonmilitary institutions will provide fresh ideas for officers who will eventually participate in strategy formulation at the highest levels. Selecting high-potential officers to attend short courses in strategic planning for large organizations will build a cadre of officers who are capable of conducting their own strategic-planning processes and creating their own mission and vision statements without hiring outside consultants. The Air Force can encourage its senior officers to write articles on national security issues and to discuss with their junior officers the strategic ideas gleaned from the Air Force chief of staff's (CSAF) professional reading list. This process will enable senior officers to demonstrate their commitment to lifelong learning and mentoring. Implementing an Air Force Fellows flag program would give selected major generals the opportunity to learn from innovative leaders both inside and outside government, while also providing the flag fellows the time to research and write about strategic-level problems and potential solutions.

If the United States Air Force is to accomplish its mission over the next generation, it must focus significant attention on developing its most critical asset: its leadership. This study recommends some changes to the current development process for officers. These changes are designed to produce senior leaders who are well equipped to meet the challenges of a demanding future.

Recommendations

Training

1. HQ USAF/A1DD should make the *Senior Leader Development Program Portfolio* (published each fiscal year) available to eligible officers.
2. The Air Force should increase emphasis on basic negotiation skills as part of the core curriculum in each level of professional military education. Add an eight-hour module on practical negotiating essentials with a role-playing exercise to the required course for all new general officers.
3. The Air Force should develop an executive preflight seminar to assist major generals transferring to O-8 assignments.
4. The Air Force should provide each general officer with a 360-degree leadership assessment and the on-call services of an executive coach.

Experience

5. Developmental teams and commanders should plan career-broadening assignments to facilitate cross-domain development for officers.
6. Developmental teams should strive to vector Air Force officers toward two joint tours during their careers. The first should occur after promotion to major and completion of intermediate developmental education (IDE).
7. The Air Force should review key colonel billets and officially designate wing commander-equivalent positions that have a comparable span of control, diversity, authority, and accountability.
8. Promotion boards should formally identify and track high-potential officers upon selection to major and attendance at in-residence IDE, and each promotion board through selection for brigadier general should review the year group to add or subtract designees.
9. The Air Force should develop opportunities to ensure that high-potential officers can acquire an experiential and training foundation in at least two of the three operational domains.

10. The Air Force should develop an on-line professional forum for new brigadier generals, similar to the Commanders Connection (<https://forums.af.edu/sqcc>) for squadron commanders, sponsored by Air University from 2006 to 2011.
11. The Air Force should develop an Air Force Fellows flag program, an education opportunity for major generals designed to expose them to innovative ideas and successful strategic leaders at the highest levels in both the military and industry.

Education

12. The Air Force should increase opportunities for officers to study topics related to national security strategy at civilian institutions.
13. The Air Force should send high-potential officers at the O-5/O-6 levels to an Air Force strategic planning seminar (a 10-day executive education course to be developed focusing on strategic planning).
14. The Air Force should encourage officers to write and publish articles on military and national security issues, especially after completion of senior developmental education.
15. The Air Force should encourage commanders, as part of their mentoring efforts, to develop their own reading programs based upon the CSAF reading list and to discuss these books with their junior officers.

Chapter 1

Introduction

Chief of Staff Tasking: *Review current Air Force leader development. Address experience, training, and education, starting with the Developing of Aerospace Leaders (DAL) initiative, and taking it forward. Generational gaps require a fresh look where changes in learning styles and technologies may point to new ways to develop Airmen. Focus on leader development that prepares Airmen of all ranks for the evolving security challenges in the Joint and Service environments.*

—Gen Norton A. Schwartz, chief of staff, US Air Force
Memorandum to Air Force Research Institute
23 November 2010
AFRI CSAF Research Priority for FY11

Leadership is the key ingredient for successful military endeavors. Air Force leaders at every level must prepare themselves to meet present and future challenges. In response to the above tasking from the chief of staff of the Air Force (CSAF), Gen Norton A. Schwartz, the Air Force Research Institute (AFRI) research team focused on the task of developing senior leaders who could be successful in the unknown, challenging future security environment. If the objective of the leader development process could be described, then the process itself could be deconstructed, analyzed, and improved. If the desired end result were known (the senior leader created to be successful in the future environment), then incremental improvements to the leader development process could be determined and recommended. Toward this end, AFRI researchers asked the following questions:

1. What leadership challenges await future senior leaders?
2. What leadership characteristics should future senior leaders possess?

3. How does the Air Force currently develop future senior leaders?
4. What are potential improvement areas for current Air Force development activities (education, training, and experience)?

This study provides recommendations to address these issues.

Overview

The remainder of this chapter introduces some of the challenges facing senior leadership in the future and describes the chaotic features of the future strategic environment. Chapter 2 summarizes leadership concepts. The research team examined the literature on senior leadership in both military and civilian contexts. The team also interviewed more than 35 active-duty and retired senior leaders and subject-matter experts on leadership education, training, assignment policy, senior leader development, and past Air Force leadership and personnel initiatives. Correlating these issues and requirements with aspects of the future national security environment, the research team synthesized various perspectives on senior leadership. This synthesis generated a list of desired characteristics for senior leaders in the challenging future environment.

Having described a desired end state for the Air Force leader development process, the research team examined current education, training, and development policies within the context of the promotion process (chap. 3). This analysis produced a number of recommendations to strengthen Air Force leadership development and to produce adaptive leaders who will successfully face unpredictable challenges in service, joint, and international environments (chap. 4). Chapter 5 summarizes the findings of the study.

Discussion

The concept of leadership is as old as history itself. Throughout time, people have aspired to be in charge, to be out in front, and to persuade or coerce others. Likewise, the search for and development of effective leaders have been a major concern for diverse organizations, including the military services. In corpo-

rate America as well as military organizations, various philosophical, political, and social influences have fashioned theories and practices on how organizations think about the interaction between followers and leaders.¹ These same influences have created leadership models to generate responses to different leadership challenges. The global environment is changing at an accelerating pace, thus increasing the range and depth of challenges for which leaders must be prepared.

The fact is that the world is a complex, fluid place requiring adaptive reactions. Current and emergent changes to the military services' operational environment suggest the need for new leadership prototypes as well as different, if not more sophisticated, methods of developing military leaders.² Recent technological advances have caused an exponential change in the nature of warfare. Data flow has increased dramatically while communication technologies have not only brought real-time information to the decision makers but also highlighted to the world the battlefield in its true colors. Added to traditional war-fighting missions are those of peacemaking, peacekeeping, humanitarian interventions, human and environmental security operations, and conservation and support.³ A major shift has taken place from the Cold War's bipolar contingency to one of an emergent dynamic asymmetric conflict. There is a subtle yet inexorable blurring of the traditional divisions between the tactical, operational, and strategic zones of battle. As author Thomas Friedman asserts, the world is now flat,⁴ and the global nature of business, including military business, is offered for real-time consumption to any audience.

The multitude of changes in the past two decades has greatly expanded the leader's role, making the employment of effective leadership much more complex. Leaders at all levels currently face challenges and pressures not specifically addressed within the services' formal development programs. Today's company-grade officers are more likely to tackle problems traditionally reserved a generation ago for senior leaders. Accordingly, future military operating environment studies (e.g., Zaccaro, Klimoski, and Boyce's 1999 report and AFRI's *Air Force Strategy Study 2020–2030*) predict that officers will require skill sets that include the ability to effectively lead units, solve problems, be more adaptive, and be more autonomous in decision making.⁵

While some of these skill sets are developed currently, these highlighted environmental changes suggest a review of current and future leadership development in the US Air Force to ensure its success in a chaotic, global operating environment.

The overall force development challenge is to determine the strategic leader attributes Air Force decision makers need to succeed. The first step in determining this is to recognize the challenges likely to face future Air Force leaders.

The challenges facing twenty-first-century war fighters will put a premium on initiative and flexibility in the junior ranks. The services have placed great emphasis on small military units that must achieve mission success with greater autonomy while relying heavily on individual creativity. To meet this challenge, the USAF of today must focus on the deliberate development of its leaders for tomorrow. Developing a pool of leaders capable of adapting to changing environments and emerging challenges provides for flexibility as a weapon in response to unconventional enemies, situations, and missions. It is far better to ask the question “Who is best qualified to do the job?” than it is to be forced to send whoever happens to be available. But these flexible, creative leaders cannot be developed overnight.

The Future Environment

In a future where volatility, uncertainty, complexity, and ambiguity (VUCA) are prominent characteristics of the strategic environment, the Air Force leaders of tomorrow will face challenges that are certain to test the service’s best and brightest.⁶ The future is likely to develop in stark contrast to the Cold War bipolar constancy in which today’s senior leaders spent their formative years. Emerging demographic, economic, environmental (climate change), and technological trends suggest that the future strategic environment will prove even more chaotic than today’s and more unstable than that experienced by previous generations. For future Air Force leaders to succeed, they must develop a personal strategic decision-making process that is adept at incorporating rapid, unpredictable change (volatility), unknown circumstances (uncertainty), intricately interwoven decision factors (complexity), and vagueness about the current situation and potential outcomes (ambiguity).⁷ The

volatile, uncertain, complex, and ambiguous environment will persist and most likely grow far into the next several decades.

Volatility

When the self-immolation of Mohamed Bouazizi occurred on 17 December 2010, not a single voice in the international media suggested this event would set off a firestorm that in 28 days would lead to the ouster of longtime Tunisian president Zine El Abidine Ben Ali.⁸ Nor were there suggestions that Egyptian president Hosni Mubarak would be forced from office within a few months after the Tunisian ouster.⁹ Predictions of mass protests in Bahrain, Syria, Yemen, and across the region were also strikingly absent.¹⁰ Equally missing were forecasts that Libya would soon be engulfed in a civil war.¹¹ The underlying volatility that began erupting across the Middle East caught many in the media by surprise. However, the Air Force's next generation of leaders should expect volatility to remain a constant companion.

As technology enables ever-greater communication between people, the probability of unpredictable and erratic responses to mass information is likely. Where it was once possible to isolate a nation or group from the wider world, such is no longer a possibility. Social networking and the "new media" are providing previously voiceless individuals unfiltered access to the world stage.¹² How governments, transnational movements, and individuals respond to the increasing flow of information not only is difficult to predict but is increasingly proving to be more volatile, influencing both economic markets and political stability.

Uncertainty

The escalating pace of new technologies along with America's long-term fiscal challenges is causing increased uncertainty within the strategic environment.¹³ For the United States and its future Air Force leaders, these trends will have two implications. First, the proliferation of advanced technology is likely to undercut America's advantage, a position it leveraged to dominate warfare during the twentieth century.¹⁴ Neyla Arnes argues that great powers, rogue regimes, and nonstate actors

may soon possess capabilities that serve as significant equalizers and deterrents.¹⁵ Second, America's long-term fiscal health is far from certain.¹⁶ When the nation's fiscal challenges are coupled with the growing economic and military power of potential peer competitors, strategic uncertainty increases.

Complexity

Robert Gates agrees with Arnes that whereas the United States and the Soviet Union once dominated the international system, the world is becoming an increasingly complex web of great powers, rogue regimes, and nonstate actors.¹⁷ Because each actor poses a unique set of economic and security concerns for the United States, the USAF faces a strategic environment where it must address complex circumstances. This situation requires an unprecedented understanding of international relations and the second-, third-, and nth-order effects of American action. With a number of nations facing demographic and economic challenges while others experience rapid growth, the number of variables is expanding.¹⁸ In addition to man-made challenges, changes in the environment will present problems as well, to include rising sea levels, new deep-water passages through northern Canada, shortages of potable and irrigation water, and scarcity of inexpensive energy sources. Undoubtedly, the future will be marked by a complexity that is even greater than the current period.

Ambiguity

Because the international system is becoming ever more crowded with a diverse array of unpredictable actors, determining exactly who did what to whom is proving difficult in many instances. This problem will not dissipate in the coming years but will likely grow as advanced technology proliferates and adversaries of the United States actively seek to complicate attribution. As cyber increases in operational importance, the growing attribution ambiguity in that domain will prove particularly problematic for Air Force leaders. Adapting to a strategic environment where adversaries are hard to identify will be even more critical for service leaders.

The Challenge

So how do the challenges of tomorrow differ from those of today? Several significant issues come to mind. First, the leaders of tomorrow must operate in an environment where the magnitude of the resource constraints is unknown but significant. Planning multiyear systems acquisitions and developing manpower requirements will be exacting, indeed. Second, technology has vastly reduced the decision-making cycle. Leaders must be comfortable when synthesizing information and making decisions while confronted with continuous streams of data coming their way every hour of every day. Third, leaders must be prepared to work as team members and diplomats when the balance of military and economic power begins to shift away from the United States. In summation, Air Force leaders must generate ideas, foster change, search for unique solutions, and reject the status quo.

The clock is ticking. The Air Force must examine its current force development process, making appropriate changes to prepare its Airmen to meet tomorrow's VUCA challenges. This race—and it is a race—can only be won if all involved clearly recognize and commit themselves to grow senior leaders capable of successfully operating in changing, often chaotic, ultimately unpredictable environments.

The primary developmental challenge is to determine which strategic leader attributes will be required of future senior Air Force leaders. Chapter 2 provides an overview of basic leadership concepts, discusses various perspectives on senior leaders, and describes the senior leader capable of operating successfully in the challenging VUCA environment.

Notes

1. Jack Burns, "A River Runs through It: A Metaphor for Teaching Leadership Theory," *Journal of Leadership Studies* 7, no. 3 (2000).
2. Stephen Zaccaro, *Training and Development of Key Leader Skills That Contribute to Effective Leadership in Complex Military Environments* (Washington, DC: George Mason University, 2003), 1.
3. Ibid.
4. Thomas Friedman, *The World Is Flat* (New York: Farrar, Straus, and Giroux, 2005).

5. Zaccaro, *Training and Development of Key Leader Skills*, 1. For future military operating environment studies, see Stephen J. Zaccaro, Richard J. Klimoski, and Lisa A. Boyce, *The Changing U.S. Army: A Summary of Future-Focused Reports from 1990–1999* (Alexandria, VA: US Army Research Institute for the Behavioral and Social Sciences, 1999); and Gen John A. Shaud, *Air Force Strategy Study 2020–2030* (Maxwell AFB, AL: Air University Press, 2011).

6. See Eric G. Kail, “Leading Effectively in a VUCA Environment: V Is for Volatility,” *Harvard Business Review*, 3 November 2010, <http://blogs.hbr.org/frontline-leadership/2010/11/leading-in-a-vuca-environment.html>; Kail, “Leading Effectively in a VUCA Environment: U Is for Uncertainty,” *Harvard Business Review*, 10 November 2010, <http://blogs.hbr.org/frontline-leadership/2010/11/leading-in-a-vuca-environment-1.html>; Kail, “Leading Effectively in a VUCA Environment: C Is for Complexity,” *Harvard Business Review*, 3 December 2010, <http://blogs.hbr.org/frontline-leadership/2010/12/leading-effectively-in-a-vuca.html>; and Kail, “Leading Effectively in a VUCA Environment: A Is for Ambiguity,” *Harvard Business Review*, 6 January 2011, <http://blogs.hbr.org/frontline-leadership/2011/01/leading-effectively-in-a-vuca-1.html>.

7. National Defense University (NDU), *Strategic Leadership and Decision Making* (Washington, DC: NDU Press, 1998), chap 2.

8. Rania Abouzeid, “Bouazizi: The Man Who Set Himself and Tunisia on Fire,” *Time*, 21 January 2011, <http://www.time.com/time/world/article/0,8599,2043557,00.html>.

9. David Kirkpatrick, “Egypt Erupts in Jubilation as Mubarak Steps Down,” *New York Times*, 11 February 2011, <http://www.nytimes.com/2011/02/12/world/middleeast/12egypt.html>.

10. “Middle East Protests: Country by Country,” *BBC*, 11 April 2011, <http://www.bbc.co.uk/news/world-12482311>.

11. “Libya: Protests and Revolt (2011),” *New York Times*, 25 April 2011, <http://topics.nytimes.com/top/news/international/countriesandterritories/libya/index.html>.

12. See Robert Ted Gurr, *Why Men Rebel* (Princeton, NJ: Princeton University Press, 1970); and Michael Savage, “New Media Give Popular Protest a Fresh Voice,” *Independent*, 11 January 2011, <http://www.independent.co.uk/news/uk/politics/new-media-give-popular-protest-a-fresh-voice-2176107.html>.

13. Stephen J. Hagel et al., *The Future of Global US Air Force Basing 2010–2040*, unpublished manuscript (Maxwell AFB, AL: Air Force Research Institute, 2010), 34–36.

14. Matthew Hoey, “The Proliferation of Space Warfare Technology,” *Bulletin of the Atomic Scientists*, 11 December 2008, <http://www.thebulletin.org/web-edition/features/the-proliferation-of-space-warfare-technology>; and Hagel et al., *Future of Global US Air Force Basing*, 41–50.

15. Neyla Arnes, *Fighting Change* (Washington, DC: NDU Press, 2009), 259–72.

16. John Shaud, *Air Force Strategy Study 2020–2030* (Maxwell AFB, AL: Air University Press, 2011), 68–69.
17. Robert Gates, *Quadrennial Defense Review* (Washington, DC: Department of Defense, 2010), 5–9.
18. Adecco Institute, *Facing Europe’s Demographic Challenge: The Demographic Fitness Survey 2007* (London: Adecco Institute, 2008).

Chapter 2

Leadership Concepts

The military has a distinct advantage over most of corporate America in terms of leader development. The military develops its own. Growing one's own leaders has immense advantages because the organization controls its own end product. It can develop the leaders it needs through education, training, and experience. The hard part is determining the needed leadership skills, competencies, and characteristics 20 to 30 years from their actual application. This chapter provides a foundation for studying leadership, reviews discussions about senior leader behavior and attributes, and proposes a set of characteristics future senior leaders should have.

Overview

Over the past two centuries, four classic approaches have been used to define the basic concept of leadership. The *trait approach* studied the personal skills and characteristics of great men, attributing their rise to power to these "heroic" traits. The *situationalist approach* asserted that the crucible of extraordinary times and circumstances calls forth differing leadership skills and abilities in the leaders involved. A melding of these two theories yielded the *contingency theory*, "which posits that the appropriate style of leadership is contingent on the requirements of the particular situation." Finally, the *transactional approach* attributed the accumulation of influence to the reciprocal transactions between leaders and followers.¹

James MacGregor Burns suggested that not only must socially useful goals meet the needs of followers, they also should elevate followers to a higher moral level. According to Abraham Maslow, once the basic needs of survival and security are met, people concern themselves with higher needs like affection, belonging, the common good, or serving others.² Many scholars identify this form of leadership as *transformational leadership*.

Developing Aerospace Leaders

When asked to review Air Force leader development programs, the AFRI research team's first point of reference was the Developing of Aerospace Leaders (DAL) initiative. In June 1999 at Corona Top, Air Force chief of staff Gen Michael E. Ryan directed the establishment of the DAL initiative, "a deliberate and proactive effort to shape the long-term leadership of the force."³ Retired Maj Gen Charles D. Link led the DAL project with the objective of growing Air Force leaders of all ranks who understood and could apply the principles of airpower beyond the narrow confines of their own functional specialties.⁴ Of critical interest was the need to develop a "bench" of senior officers with both broad and deep resumes, so the CSAF could select from a suitable pool of capable candidates when nominating officers for its most senior positions. Over the next few years the DAL program office initiated actions to improve Air Force leader development, but efforts to "operationalize" leadership competencies expressed by the DAL's vision were unsuccessful. This was due, in part, to competing interests between the Air Staff and the functional managers at the Air Force Personnel Center (AFPC). While the Directorate of Force Development (AF/A1D) thought in terms of developing broad leadership traits, functional managers at the AFPC were interested primarily in concrete assignment results.⁵ In 2002 the DAL office began transitioning into the Air Force Senior Leader Management Office (AFSLMO). AFSLMO responsibilities eventually migrated to various offices under the A1D and to development teams at the AFPC.⁶

Leadership and Force Development Concepts

Air Force leadership and force development concepts continued to evolve as AFDD 1-1, *Leadership and Force Development*, was published in February 2004 and updated in February 2006.⁷ AFDD 1-1 describes strategic-level leaders as highly technically competent with broad leadership skills. These leaders direct complex, multilevel organizations across the spectrum of interagency, interservice, and international agencies. As AFDD 1-1 states, "Senior leaders need tactical comprehen-

sion and competence, as well as broader perspectives and the ability to effectively lead Airmen and joint forces in an expeditionary environment. They should embody Air Force cultural and core values that were nourished throughout the individual's career."⁸ AFDD 1-1 also includes a list of "enduring leadership competencies" organized under the categories of personal leadership, leading people/teams, and leading the institution.⁹ All Air Force members should embody these competencies, which are used to develop occupational skill sets and direct development activities.¹⁰

The Directorate of Force Development updated the list of enduring leadership competencies to create the Air Force institutional competency list (ICL) to integrate and focus the various development programs for Airmen as they progress through their careers. Air Force Policy Directive 36-26, *Total Force Development*, provides the initial version of the ICL with eight competencies and several subcompetencies for each. AFRPD 36-26 also includes a list of the personnel, training, and educational institutions responsible for developing institutional competencies and executing force development.¹¹ The Directorate of Force Development further refined the concept of institutional competencies by developing a matrix showing the competencies and subcompetencies with descriptions of the behavior associated with each as the individual AF member progresses from the basic to advanced levels of rank and responsibilities.¹²

Air Force senior leaders, regardless of their technical orientation, must be able to conceptualize the spectrum of Air Force capabilities across air, space, and cyberspace and synthesize them into operational capabilities to produce the desired operational effects. These leaders must be able to articulate these concepts to the joint force commander and lead the implementation. Successful senior leaders must be proficient cross-domain leaders.

Characteristics of Future Leaders

The AFRI research team's objective was to describe the desired end result of the Air Force leader development process: the senior leader who is capable of operating successfully in a VUCA environment. The team analyzed and categorized senior

leader characteristics from interviews and a literature review and evaluated whether these characteristics could assist the leader in addressing the challenges presented by the VUCA environment. The result is a list of desired characteristics for senior leaders in the VUCA environment, to be termed *future senior leaders*.

RAND researchers interviewed a group of joint senior leaders with experience in irregular and hybrid warfare to determine the characteristics regarded as essential for successful strategic leadership in those environments. The researchers grouped the outcomes in three categories based on style: cognitive, interpersonal, and managerial. The main skills and characteristics included humor, mentorship, communication skills, problem-solving cognitive processes, ability to harmonize actions at the three levels of war, sociability and a preference for relationship building, cross-cultural and language capabilities, and an understanding of organizations.¹³ The AFRI research team modified the categories used to describe characteristics of future strategic leaders as follows: cognitive, interpersonal, and personal style.

Cognitive Characteristics

Cognitive characteristics relate to conscious intellectual activity. Future leaders are self-aware and possess a high level of metacognition. Conscious and critical of their own thought processes, they can step back and view problems and proposed solutions from a detached perspective.

Visionary Thinker. This leader thinks critically, strategically, and creatively to meet both present and future challenges. In a recent statement on leader development, Gen Martin E. Dempsey, then US Army chief of staff, explained that strategic leaders must have “an educational foundation that enables creative and critical thinking in an environment of complexity, ambiguity, and uncertainty.”¹⁴ Visionary leadership is transformative and based on the power of inspiration.¹⁵ It is often characterized by a commitment to core values, clear visions, and respect for empowering relationships and facilitated by courageous and innovative action. Visionary leadership supports creative interventions to processes, technological developments, and keeping

up with emerging challenges. Strategic thinking is an ongoing activity where leaders constantly scan the current environments seeking a glimpse of possible futures. A dose of creative thinking supported by critical thinking skills helps the leader in this endeavor.

Polymath. A polymath, or Renaissance man or woman, is an accomplished person with wide-ranging intellectual interests in both the arts and sciences. A successful future leader is mentally agile and often described as a “quick study.” A lifelong endeavor of learning and continuous self-improvement must be part of every leader’s psyche; “the officer profession must commit itself to a lifetime of dedicated study of strategy, politics, economics, and history. Future leaders are those who are always open to learning.”¹⁶ In his study of more than 1,000 general officers, Edgar Puryear described the habit of avid reading as one of the hallmarks of a successful senior officer.¹⁷

Interpersonal Characteristics

Team-Building and Networking. Future leaders must be interested in relationship-building within their own organizations. They must be willing to make an extra effort to build relationships with their counterparts in other organizations, including other services, agencies, and allies. They must have and refine networking skills to meet and keep track of potential teammates and allies across a broad range of constituencies.¹⁸ Officers must cultivate these skills early in their careers.

Politically Savvy. Future leaders need a degree of political savviness. They must work smoothly and successfully within a range of organizations and leadership structures. They must be able to differentiate between stated and actual power holders and work with them accordingly. Future leaders must be comfortable serving as facilitators and negotiators.¹⁹ These personal skills enable future leaders to work effectively across the bounds of services, countries, and cultures.

Future leaders must have experience in building partnerships, both in and out of the Air Force, and be skilled in collaborating with peers, other services, interagency organizations, and coalition partners. The value of the Allied partnership efforts in World War II illustrates this case: “Our success in

this war now depends on leadership,' he [George Marshall] said, and the leadership he referred to was not confined to the American military; it included the senior commanders of America's primary allies. Marshall's simple calculus was Conner's and, now, Eisenhower's: If the United States could build and maintain a strong alliance it would be victorious; if it could not it would be defeated."²⁰

More recently, the rise of regional policy in the post-Cold War era transformed regional combatant commanders into critical players in defense policy making. Part of this transformation has been an increased emphasis on partnership building and alliances.²¹ Regional commanders suddenly found themselves in cooperative engagements and larger military training enterprises. Consequently, Congress and the presidential administrations have listened closely to these regional commanders as they worked to build international policy. Delivering a message to politicians has become an important part of senior commanders' jobs. Since senior appointments, such as regional commands, must be confirmed by Congress, the ability to skillfully navigate Capitol Hill must be considered part of the senior leader's skill set. Thus, senior leaders must remain apolitical while striving to be politically savvy.

Culturally Astute. Future leaders must also be culturally astute and skilled negotiators. In their discussion of Army strategic leadership competencies, Dr. Leonard Wong and his colleagues at the US Army War College describe the metacompetency "cross-cultural savvy" as the ability to work with non-US militaries as well as "the ability to understand cultures beyond one's organizational, economic, religious, societal, geographical, and political boundaries."²² Paraphrasing Dr. Wong's ideas, it is becoming increasingly important for Air Force officers to effectively discuss wide-ranging issues with those outside the Air Force culture and to work with them accordingly. Air Force leaders must have skills to work with their counterparts in other services, government agencies, nongovernmental organizations, and other countries.

Skilled Negotiator and Facilitator. Since senior leaders often are charged with mission success that requires working with people over whom they have no direct authority, the ability to resolve issues through persuasion and influence is key to

their negotiation skills set. The Air Force Negotiation Center of Excellence (NCE) offers short blocks of instruction across the spectrum of Air Force professional military education (PME) and can produce tailored courses in cross-cultural negotiation on demand.²³ See the appendix for more detail. Traditional negotiation courses, such as those offered in business schools, focus on the American “business model” of negotiation—a model not especially suited to the cross-cultural situations senior leaders would encounter overseas. As a side note, recognizing this need, instruction on how to negotiate will be added soon to the US Army’s leader development program.²⁴

Emotionally Resilient. Given the future’s uncertainty, fast pace, huge amounts of often-conflicting data, and rapidly shifting dynamics, future leaders must have coping skills to meet the wide range of challenges facing them. They must be willing to access a range of resources to help them and their subordinates cope with the emotional and psychological rigors of the VUCA environment. Following the example of US Army resiliency training,²⁵ leaders must be dedicated to both mental and emotional stability as well as physical fitness, so they may thrive in an era of high operational tempos and persistent conflict.

Personal Style Characteristics

Ethically Grounded. Future leaders must rely on a strong ethical basis on which their selflessness and humility can flourish. As Gen Montgomery Meigs explained in his article on generalship, “Good generals are not worried about themselves when they make the tough decisions.”²⁶

Strategic Communicator. Future leaders hone their writing and speaking skills over a lifetime of reading, listening, practice, and delivery. They must be willing to share information, to encourage frank and open dialogue, and to approach issues with a broad, problem-solving perspective to convey mission goals to a diverse group of stakeholders, allies, and others.²⁷

Mentor. Future leaders must be able to use their relationship-building skills to counsel their juniors and peers and to create collaborative teams. Future leaders build their replacements and share their ideas and philosophies for the future with others.

Resource Steward. Future leaders must be able to assess conflicting resource requests and allocate limited resources to most effectively support the enterprise's overall strategy. This characteristic—always important—is even more so in an increasingly resource-constrained environment.

Producing Senior Leaders

Once the desired senior-leader characteristics have been identified, they may be cultivated in senior Air Force leaders through a deliberate development process of training, education, and experience. Chapter 3 examines the current deliberate development process.

Notes

1. Ronald A. Heifetz, *Leadership without Easy Answers* (Cambridge, MA: Belknap Press of Harvard University Press, 1994), 16–18.
2. *Ibid.*, 21.
3. *Developing Aerospace Leaders: The Early Years*, 15 May 2002, xvi, xxix.
4. John T. Correll, “Developing Aerospace Leaders,” *Air Force Magazine*, December 2001, 63.
5. Dr. Steven Wright, Air University, interview by authors, 28 July 2011.
6. Greg Price, Air Staff Force Development Integration Division (AF/A1D1), talking paper on evolution of DAL to force development, 16 November 2010.
7. Air Force Doctrine Document (AFDD) 1-1, *Leadership and Force Development*, 18 February 2006, i–ii.
8. *Ibid.*, 17–18.
9. *Ibid.*, appendix B, 41–44.
10. *Ibid.*, 10–11.
11. Air Force Policy Directive (AFPD) 36–26, *Total Force Development*, 27 August 2008, para. 2.6, attach. 2.
12. Institutional competency list (ICL) spreadsheet, AF/A1D, e-mail from Dr. Suzanne Logan, Spaatz Center/CF, to Dr. Karen Currie, AFRI/RIR, 7 January 2011.
13. Barak A. Salmoni, Jessica Hart, Renny McPherson, and Aidan Kirby Winn, “Growing Strategic Leaders for Future Conflict,” *Parameters* 40, no. 1 (Spring 2010): 72–75.
14. Martin E. Dempsey, “Building Critical Thinkers,” *Armed Forces Journal*, February 2011, <http://www.armedforcesjournal.com>.
15. R. S. Dwivedi, “Visionary Leadership: A Survey of Literature and Case Study of Dr. A. P. J. Abdul Kalam at DRDL,” *Vision* 11, no. 3 (July–September 2006).

16. John A. Nagl and Brian M. Burton, "Revitalizing America's Officer Corps," in *Keeping the Edge: Revitalizing America's Officer Corps*, eds. John A. Nagl and Brian M. Burton (Washington, DC: Center for a New American Security, 2010), 66.
17. Edgar F. Puryear Jr., *American Generalship: Character Is Everything: The Art of Command* (Novato, CA: Presidio Press, 2002), 349–52.
18. Salmoni et al., "Growing Strategic Leaders," 73–74.
19. Ibid.
20. Mark Perry, *Partners in Command: George Marshall and Dwight Eisenhower in War and Peace* (New York: Penguin Press, 2007), 188.
21. Rebecca Grant, "Why Airmen Don't Command," *Air Force Magazine*, March 2008.
22. Leonard Wong, Stephen Garras, William Kidd, Robert Pricone, and Richard Swengros, *Strategic Leadership Competencies* (Carlisle, PA: Strategic Studies Institute, US Army War College, September 2003), 7.
23. Air Force Negotiation Center of Excellence staff members, interview, 21 June 2011.
24. Dempsey, "Building Critical Thinkers."
25. US Army, "Comprehensive Soldier Fitness: Frequently Asked Questions," <http://csf.army.mil/faq.html>.
26. Montgomery C. Meigs, "Generalship: Qualities, Instincts, and Character," *Parameters* 31, no. 2 (Summer 2001): 11.
27. Michael Flowers, "Improving Strategic Leadership," *Military Review*, March–April 2004, 41.

Chapter 3

The Deliberate Development of Air Force Officers

The cliché that a journey of a thousand miles begins with the first step applies to leadership development as well. One cannot aspire to become a general officer—which occurs at approximately the 24-year mark of service—unless one first successfully completes those steps to the rank of colonel. One cannot become a colonel, particularly a colonel with the potential to lead as a general officer, without the proper training, experience, and education beforehand. What training milestones, educational venues, and developmental assignments provide the needed experience and education? This chapter provides an overview of those processes and a discussion of some special interest items in the development process.

For purposes of analysis, the path to the 24-year point can be divided into three sections: the first 10 years, a period of technical skills acquisition and mastery; the next 12, for career broadening, leadership opportunities, and career growth leading to promotion to colonel; and the final two years, where wing command is the recognized crucible for increased leadership and promotion consideration. For the successful general officer candidates, promotion to colonel will occur considerably earlier than 22 years due to below-the-zone promotions.

Before that 24-year point for selection to flag rank, there is a natural framework for leadership development from major at the 10-year point to promotion to colonel at the 22nd for officers promoted on time. An officer's first 10 years are usually focused on the development and mastery of technical skills within an Air Force specialty code. This point is an average, and some career fields—aviation-related, scientific/engineering, and some technical skills fields, for example—require longer periods for mastery. Nevertheless, selection to major and in-residence intermediate developmental education (IDE) selection are two career points that frame this discussion well.

Education to Year 24

Education for O-1 to O-4

In the first 10 years of an Air Force officer's career, educational expectations center on Squadron Officer School (SOS) and pursuit of an advanced degree. SOS provides an opportunity to acquire and showcase leadership skills in a peer setting. Earning "distinguished graduate" (DG) status is as important as the educational aspects of SOS, because—as noted above—relatively few Air Force company-grade officers are placed in leadership positions during these early years, their focus being on the mastery of a career-specific skill set. Designation as an SOS DG recognizes both academic accomplishment and leadership skills.¹

The issue of acquiring an advanced academic degree is less straightforward. While not a policy requirement for promotion to major, acquiring an advanced academic degree is deemed by the Air Force as a requisite milestone for either promotion consideration and/or IDE in-residence selection. Based on a recent snapshot of officer advanced-degree completion, the drive toward a master's degree appears to coincide roughly with promotion to captain and continues well into the rank of major. April 2011 data from AFPC shows only 723 first lieutenants (about 10 percent of the cohort) have earned a master's degree. Air Force captains, whose numbers are three times those of first lieutenants (18,874 to 6,730), have earned over 10 times more master's degrees (7,533) than their first-lieutenant counterparts. Roughly four out of 10 captains (39.9 percent) have a master's degree.² Air Force officers are expected to earn an advanced academic degree before meeting the O-4 board, the rationale being that an advanced academic degree may factor in earning a "definitely promote" (DP) rating versus a "promote" (P) on a promotion recommendation form (PRF).³ For captains, the "better safe than sorry" approach motivates them to earn a master's.

The question of what advanced academic disciplines should be pursued brought numerous and varied replies in the senior officer interviews. Some of the interviewees thought that any master's degree—particularly one pursued outside normal duties—showed initiative and discipline and should be rewarded accordingly. Still others wondered about the usefulness of a

master's degree before IDE, since these programs usually award a master's degree upon completion.⁴ Other interviewees were more specific. One Pentagon general cited a master of business administration (MBA) as the most useful degree for senior leaders, observing, "All we do here—all day—is work with spreadsheets." Indeed, MBAs and other business-related degrees are far and away the most numerous held by captains, comprising 27.3 percent of the total number—nearly four times the total of the next academic discipline. Majors with MBAs and other advanced business degrees are twice as numerous as those with advanced degrees in any other discipline, comprising 24 percent of total advanced degrees for the entire O-4 cohort.⁵

Does an MBA mark officers as future senior leaders? If one looks at the demographics of today's colonels (the next cohort of general officers), the answer would be "not yet." Over 50 percent of colonels with a master's degree (only one colonel has just a bachelor's degree) hold advanced degrees in either political science (17.8 percent) or social sciences (33.1 percent); only 10.9 percent have MBAs. However, the "business" trend in the lower ranks is undeniable: advanced degrees in business for both captains and majors are the most common (24 percent), and for lieutenant colonels, they are second (20.6 percent) only to "airpower studies" (23.8 percent).⁶

There also is debate in academia about the relative value of an online master's versus a traditional "bricks and mortar" degree. Given that Air University itself is a leader in distance education, this is perhaps a nonissue; however, online course offerings may limit the range of choices, giving rise to more MBAs than other, more specialized degrees, such as those in the laboratory sciences. Moreover, the opportunities to share ideas and to be exposed to differing viewpoints are compelling reasons for in-resident graduate studies at civilian institutions.⁷

Finally, note that while second lieutenants hold a wide variety of undergraduate majors at accession, if the current trend continues, these lieutenants may well end up earning master's degrees in much narrower concentrations.⁸ While the ops tempo may limit officers' options for elective advanced education, this is also the same time period in which they would benefit from a more formal development of critical-thinking skills while interacting with diverse civilian peers. It is unclear if such "give

and take” is possible via online studies, but such studies are highly unlikely to achieve the same desired outcomes as face-to-face education. The House Armed Services Committee’s (HASC) 2010 report on PME produced a similar view: “Finding: The intellectual development of officers, especially in critical thinking skills, is facilitated by assignment to civilian graduate education programs at top-tier universities relatively early in their careers.”⁹

Education for O-4 to O-6

Advanced formal education is an important facet in Air Force leadership development and is primarily achieved in the first 10 years of an officer’s career. The next phase—major through colonel—tends to center on broad experience and short, focused educational interludes, culminating in senior developmental education (SDE), itself a 10-month program. SDE is virtually the only educational event in this time frame. This “required” in-residence assignment cannot be overlooked or overemphasized as a prerequisite for senior rank. Where SDE takes place—Air War College, another service college, the National Defense University, and others—also has a significant impact on career development. Like squadron command, in-residence SDE is another indicator of high potential.¹⁰

Education in Years 23 and 24

Most formal education is completed by the 24th year, with the exception of short courses at major institutions such as Harvard or the National Defense University. Instead of serving as students themselves, these senior officers now serve as senior mentors, using their educational experiences to advise officers on courses of study and timing of educational events.

Training and Experience to Year 24

Training and Experience for O-1 to O-4

The Air Force is a technical service, and achieving technical prowess will consume the better part of an officer’s first 10 years of service. Although formal training may vary in length from

career field to career field,¹¹ it is widely agreed that an officer's focus should be on those "core capabilities" until the officer reaches the O-4 plateau. This achievement allows time for both initial and advanced skills training (e.g., fighter lead-in training). In contrast, formal training beyond the 10-year point decreases the focus on technical prowess and increases the focus on leadership/management skills as officers move to positions of greater responsibility, scope, and authority (i.e., command).

During the first 10 years, almost every facet of officers' careers is vectored by the developmental teams (DT). DTs ensure that initial and upgrade training creates a technically sound Air Force officer. This is a "tribal" approach, bounded by AFSCs and even by Air Force functions (e.g., combat air force, special operations, mobility air force, etc.).

First duty assignments allow officers to hone the technical skills obtained in formal training and to gain from other focused training, such as weapons school. However, opportunities for company-grade Air Force officers to command are rare. For example, rated officers—of necessity—concentrate on the acquisition of flying skills required by high-performance, technically advanced weapon systems. The first command opportunity for rated officers is usually well after the 10-year career point—more than likely as a lieutenant colonel after 15 years. Conversely, some nonrated careers (e.g., security forces and logistics) do offer command opportunities to their captains. Although not everyone has a chance to command by the time he or she reaches O-4, tactical- and mid-level *leadership* opportunities are widespread, giving officers multiple ways to demonstrate and develop this competency.

The first 10 years should be "Air Force-centered" to ensure as complete a technical mastery as practical. Recent RAND and HASC studies agree with this technical grounding in the early years of an officer's career.¹²

Training and Experience for O-4 to O-6

Beyond the 10-year point, career-broadening assignments may require additional training prerequisites, particularly if the assignment is in another domain (e.g., space to cyber, air to space). Note, however, that an officer's focus shifts from train-

ing to experiential development across a wide variety of assignments. A senior leader commented that this time frame is a “family of opportunities” for leadership development. This should be a period where commanders and DTs identify officers with high potential and craft deliberate career paths to broaden and deepen their expertise.

In truth, the number of leadership development “opportunities” exceeds the time needed to do them. In addition to formal training and education, some of the most common developmental experiences include

- joint tours,
- major command (MAJCOM)/Air Staff tours,
- career-broadening assignments into education, training, and/or recruiting,
- interagency tours, and
- squadron command.

Joint Tours. Because of the Goldwater-Nichols Act, joint tours have become the *sine qua non* for serious senior leadership development.¹³ As discussed earlier, a joint tour should not occur too early in an officer’s career because of the need to thoroughly understand the Air Force mission to be effective in the joint environment.

Air Staff Tours. One of the attributes identified for effective senior leaders is political savvy. This in no way implies a violation of the nonpolitical nature of military service that is key to our democracy, but it does mean having a sense of the budgetary, policy, and legislative processes. Not every officer can be a legislative fellow or serve as an Air Force legislative liaison, but any Air Staff tour exposes officers to the nuances of a service headquarters’ prioritization and decision-making processes. It also provides an excellent chance to build and maintain a network of service and cross-service contacts.¹⁴

Career-Broadening Assignments. Career “stovepiping” within one discipline does not effectively season an officer for senior-level responsibilities. One senior officer observed, “We don’t grow cross-domain officers.” A 2007 RAND Project Air Force study sought to create “paired secondary occupations” for Air Force officers to

prepare them better to be colonels and general officers.¹⁵ However, this proposal lacks the assignment flexibility needed to support combat and contingency operations; it does not account for joint tour requirements; and it does not recognize the cross-domain competencies required for senior rank.

Since the Air Force operates in the three domains of air, space, and cyber, acculturation across domains is key for senior leadership development. Having another perspective on the Air Force's contribution to the joint fight is vital to effective leadership.

Interagency Tours. Some interviewees commented on the benefits of an interagency tour, citing the Air Force's involvement in nation-building and security-assistance missions. They believe these missions will become core to the Air Force's contributions in the future. However, one flag officer issued a caveat, pointing out that an interagency tour takes an officer out of the mainstream and provides no continuity with the supported agency once the officer returns to an Air Force billet.

Squadron Command. Squadron command is a key indicator for increased rank and responsibility and usually is the result of careful growth within the squadron structure itself (e.g., squadron DO, deputy commander). Beyond squadron command and before wing command, other responsible positions may await. MAJCOM and/or Air Staff positions are often considered the next step after squadron command, although other challenging positions, including group command or a second joint tour, can be next. In short, squadron command by itself does not signal readiness for wing command.

The previous discussion is not a complete list, but it shows that field-grade officers have multiple paths to success. Forcing these developmental experiences into 10–12 years of service is difficult, if not impossible. Commander involvement to guide the process is key and must be done for each officer in this cohort—not just for those already deemed high potential. As one senior officer succinctly observed, “There are late bloomers out there.”

Training and Experience in Years 23 and 24

Although numerous beneficial short courses exist for colonels, they are usually not visible to this cohort because they are catalogued as general officer courses and thus not used for

most O-6 deliberate career planning and leadership development. In reality, few O-6 training opportunities are available at this time.

Understandably, the wing command assignment is the most sought after leadership opportunity. Wing commanders usually remain in command through at least one inspection cycle to validate their leadership capabilities for the full spectrum of wing operations. As the Air Force becomes smaller, however, wing command opportunities will become fewer. There will be more qualified colonels than wings available for the colonels to command.

Special Interest Items

Education and Experience in the Cyberspace Domain

Cyber is one AF growth area requiring future leaders to acquire more expertise no matter their career path. Cyber is a constant that will permeate leadership development and Air Force operations in the coming years. Arguably, it is the one domain that will require the most overall, force-wide training. Every Airman depends on cyberspace, and this trend will likely continue into the foreseeable future.

Moreover, cyber is evolving, and its operational applications are not as well understood as those of air and/or space power. Two overarching factors make training in the cyber domain critical. First, information and communication technologies are continuously evolving, and second, cyber is understood at very different levels by different practitioners. At this early stage of the domain's development, the organization, training, and equipping of cyber forces are in constant flux due to a lack of consensus regarding the requirements of the domain and its operators.

To use *any* AF capability effectively, leaders need an in-depth understanding. Just as leaders must have expertise in the capabilities and vulnerabilities of air and space operations, they must have the same level of expertise in cyber operations. Gaining this similarity in expertise levels entails training across all ranks and commands to assure unity of effort and delivery of the best possible cyber effects. Cyber will also require continuous training updates, as tactics, techniques, and procedures are introduced and continually evolve. While junior officers

may have an intrinsic grasp of some facets of cyber—perhaps the result of continuous upgrades in social media—this does not ensure they have the same operational perspective as senior leaders and vice versa.

Identification and Development of “High Potential” Officers

High-potential identification is recognized when seen, recorded, and acted upon by superiors but, in practice, may never be conveyed to the actual officer.¹⁶ De facto recognition of high potential exists, but nowhere is this codified. Senior staff members we interviewed at the Center for Creative Leadership (CCL) believe high-potential individuals in the military—like their counterparts in the business world—should be told they are considered high potential. The CCL contends that high-potential individuals perform better when they know of this expectation. Conversely, Air Force interviewees felt that “hi-po” officers intuitively know this and that telling them is somewhat counterproductive.

While the actual timeline for identifying high-potential Air Force officers varies, recommendation for in-residence intermediate developmental education—concurrent with selection to major—is the point at which these individuals begin to separate themselves from the rest of the officer corps and demonstrate high potential. Selection for major alone is not considered an indicator of high potential, but the combination of selection to major and designation as a “select” for in-residence IDE points to high-potential officers. According to AFPC, 94.2 percent of captains in the initial promotion zone for major were selected for promotion, but only 20 percent of those were chosen as selects for in-residence IDE.¹⁷

General Officer Development

The General Officer Management Office (AF/DPG) handles the training and development for general officers (GO). There are three mandatory courses for GOs: the Senior Leader Orientation Course (SLOC),¹⁸ the Capstone course,¹⁹ and Air Force Smart Operations in the 21st Century (AFSO21) Senior Executive Training.²⁰ The AF/DPG applies the “right person, right

opportunity, and right time” policy to a GO’s remaining developmental needs, tailoring training and other opportunities to the individual’s rank, projected assignments, and training already completed. The AF/DPG selects the GO for the specific training course (including training quota and course date), then the MAJCOM/CC or equivalent coordinates, the AF/A1 reviews, and the CSAF approves.²¹ Training courses available to GOs are listed in the *Senior Leader Development Program Portfolio* (CY 2011) published by AF/A1DD.²² They are also posted on the AF/DPG website.²³ Available courses for GOs include national security, joint war fighting, business, public policy, leadership, and specific functional areas.²⁴ Some courses are generic for all GOs, and some support the building of specific expertise, such as a specialty in East Asian politics.²⁵ However, as Gen William M. Fraser III, then vice chief of staff, stated in a policy memorandum to Air Force leadership, “Not all senior leaders can be developed equally and specific educational opportunities must be targeted to maximize effectiveness and limit expenses.”²⁶ Since developmental opportunities are scarce, resources must be managed accordingly, and selection for training opportunities must rely on careful projections of assignment opportunities and promotion potential.

The AF/DPG maintains a portfolio for each GO that includes the individual’s official service records as well as a résumé. When a GO position becomes available, the AF/DPG reviews these portfolios and forwards nomination suggestions to the four-star general requesting input. The DPG staff consolidates the comments and forwards them to the CSAF and the relevant combatant commander.²⁷ The Air Force is consciously building officers who can qualify for senior-level joint jobs. AF/DPG policy is always to nominate an AF officer for available and appropriate joint positions.²⁸

Standard Air Force policy requires that senior leaders make a personal commitment to lifelong learning. GOs, under the best of circumstances, will have the opportunity to attend formal training courses about every 12–18 months. In the interim, they must remain engaged with self-directed programs of professional reading and learning. To assist in this endeavor, the AF/DPG provides a subscription to executive book summaries, available online and downloadable to mobile devices.²⁹

While the journey from second lieutenant to brigadier general appears to be a long road with many opportunities to take side excursions, in reality it grows narrower as time passes. What may seem a long time to the 24-year point is not nearly long enough to encompass the entire polymath spectrum of growth and development. Technical expertise, the hallmark of all Airmen, must remain the early focus. What follows that achievement is the pursuit of academic excellence (e.g., a master's degree), successive PME, and joint experience.

Throughout their careers Air Force officers prepare for command by developing a desire for lifelong learning, expertise in other career areas and domains outside their chosen fields, and a variety of assignments/experiences that challenge their comfort zone.

Not every path is the same, and not every officer will develop in quite the same way. At the end of the 24-year journey, however, there will be a number of technically skilled, experienced, and self-aware officers from which to choose for increased levels of responsibility. These will be the general officers of tomorrow's Air Force.

The recommendations in the following chapter are designed to enhance the development of Air Force officers to assume senior leadership positions in tomorrow's VUCA environment.

Notes

1. According to AF/A1D policy, the top 10 percent of students in each Squadron Officer School (SOS) class are designated as distinguished graduates. Evaluation criteria include academic events, leadership exercises, peer and flight commander assessments, and physical fitness. Lt Col Michael J. Hower, AETC 31 STUS/CC to Karen W. Currie, AFRI/RIR, e-mail: "DG criteria at SOS and other stats," 20 June 2011.

2. "AFPC Education Level (Highest) by Current Grade," HQ AFPC website. According to this data pull, only 205 second lieutenants have master's degrees.

3. For captains in the initial promotion zone for major, the "DP" select rate is 99.8 percent versus a select rate of 78.1 percent for "P." "Officer Promotions," AFPC Operations Assignments Briefing, "Promotion Opportunity vs. Selection Rate (Line of the Air Force)," Slide.

4. This latter phenomenon may account for the relatively high number (1,095) of "airpower studies" master's degrees held by majors today: 11.5 percent of the total number of 9,560 officers.

5. "AFPC Education Level (Highest) by Current Grade."

6. The data constraint “highest education level” may influence these results as other degrees may have preceded an airpower studies degree awarded at Air Command and Staff College or Air War College.

7. US House of Representatives Committee on Armed Services, Subcommittee on Oversight and Investigations Report, “Another Crossroads? Professional Military Education Two Decades after the Goldwater-Nichols Act and the Skelton Panel,” April 2010, 45–46, http://democrats.armedservices.house.gov/index.cfm/files/serve?File_id=d4748d4a-b358-49d7-8c9a-aa0ba6f581a6 (hereafter referenced as “HASC Report”).

8. “AFPC Education Level (Highest) by Current Grade.”

9. “HASC Report,” 46.

10. One hundred percent of calendar year (CY) 2009 brigadier general (BG) selectees had in-residence SDE. AFPC Operations Assignments Briefing.

11. While not common, officers may be assigned to directed duty assignments at accession.

12. “HASC Report,” 46.

13. Ninety-five percent of CY 09 BG selectees had a joint tour. See AFPC Operations Assignments Briefing.

14. Seventy-two percent of CY 09 BG selectees had performed an Air Staff tour. See AFPC Operations Assignments Briefing.

15. S. Craig Moore and Marygail K. Brauner, *Advancing the U.S. Air Force's Force Development Initiative* (Santa Monica, CA: RAND, 2007), http://www.rand.org/content/dam/rand/pubs/monographs/2007/RAND_MG545.pdf.

16. Center for Creative Leadership (CCL), interview, 16 March 2011.

17. AFPC Operations Assignments Briefing; and Daniel Sitterly, director of force development, USAF, “Officer In-Residence Professional Military Education,” presentation to US House of Representatives, Committee on Armed Services and Investigations, 28 July 2009, 3, http://democrats.armedservices.house.gov/index.cfm/files/serve?File_id=b5a04897-c2e7-420a-807f-adbdc4911403.

18. The Senior Leader Orientation Course (SLOC) is a CSAF-hosted program geared toward making new brigadier generals (active duty, Reserve, and Guard) and newly appointed senior executive service (SES)/defense intelligence senior executive service (DISES) members more effective representatives of the Air Force as they assume greater leadership responsibilities. SLOC provides an opportunity to receive a top-level strategic view of the institutional Air Force. Additionally, the course incorporates sessions designed to fulfill the requirements for the OSD-required Senior Executive Equal Opportunity Seminar (SEEOS). SLOC attendance is mandatory for new active-duty brigadier generals and newly appointed career SES and DISES members. The first week of the course is held in Washington, DC. The second week of SLOC takes place in San Antonio, TX. See HQ USAF/A1DD, *Senior Leader Development Program Portfolio*, CY 2011, 40.

19. Ibid. CAPSTONE is designed to reinforce new general/flag officers' comprehension of joint matters and national security strategy needed for the remainder of their careers. It focuses on the employment of US forces in joint and combined operations to support national policy objectives. It consists of

seminars, case studies, informal discussions, visits to key US military commands within the continental United States, and overseas trips to Europe, the Pacific, and the Western Hemisphere. CAPSTONE provides personal interaction with combatant commanders, other senior US commanders, and retired four-star general and flag officers. The Goldwater-Nichols DOD Reorganization Act of 1986 requires that all active-duty general and flag officers attend CAPSTONE within two years of Senate confirmation.

20. Ibid., 7. "The objective of the Air Force Smart Operations for the 21st Century (AFSO21) Executive Leadership Course is to augment GO/SES/CCM leadership skills with an understanding of how to manage performance and strategically align continuous process improvement using AFSO21 tools. The course includes one full-day immersion in process improvement concepts and one half-day visit to an industry operation that provides first-hand exposure to Lean tools. Industry senior executives complement course material with real-world experiences in applying Lean to daily, weekly, and monthly management processes."

21. Capt Darlene Shaffer, talking paper on Senior Leader Development, *General Officer Handbook*, January 2010, 1–2, <https://www.my.af.mil/gcss-af/USAF/ep/browse.do?programId=t6925EC2F42E50FB5E044080020E329A9&channelPagId=s6925EC13371A0FB5E044080020E329A9>; and Gen Norton A. Schwartz, chief of staff, to USAF general officers, USAF senior executive service, USAF command chief master sergeants, and USAF career field managers, memorandum, 5 June 2009.

22. HQ USAF/A1DD, *Senior Leader Development Program Portfolio*, CY 2011.

23. "Course Descriptions," AF/DPG, <https://www.my.af.mil/gcss-af/USAF/ep/browse.do?programId=t6925EC2E11A10FB5E044080020E329A9&channelPagId=s6925EC13371A0FB5E044080020E329A9>, accessed 9 May 2010.

24. Shaffer, talking paper, 2.

25. CCL, interview.

26. Gen William M. Fraser III, vice chief of staff, to ALMAJCOM/CV, general officers and SES members, memorandum, 4 March 2009.

27. CCL, interview.

28. Ibid.

29. "Senior Leader Development: Book Review," AF/DPG website, <https://www.my.af.mil/gcss-af/USAF/ep/browse.do?programId=t6925EC2E6EAA0FB5E044080020E329A9&channelPagId=s6925EC13371A0FB5E044080020E329A9>, accessed 9 May 2011.

Chapter 4

Recommendations

After projecting the required characteristics for senior leaders in the VUCA environment and reviewing key issues in an Air Force officer's deliberate development, the AFRI research team generated a series of recommendations designed to enhance leadership development in the Air Force.

Training

Recommendation 1: HQ USAF/A1DD should make its Senior Leader Development Program Portfolio (published each fiscal year) available to all eligible officers.

Current Status. According to HQ USAF/A1DD, the portfolio is not made available to colonels. A list of courses available to GOs is posted on the General Officer Management Office website.¹

Discussion. Eligible officers should have access to the portfolio of courses to make the best use of all development opportunities available in preparing for their next assignment. The research team also is aware of at least one course for general officers not listed in the portfolio: the Flag Officer Pre-Deployment Acculturation Program (FOPAC) course (see appendix). In 2009 the Air Force Culture and Language Center at Air University introduced this two-week seminar on language, culture, and negotiations, tailored to the deploying flag officer's destination. Also, senior leader development management teams should review comparable programs offered by sister services to determine if any of their programs would support Air Force needs and goals.

Recommendation 2: The Air Force should increase emphasis on basic negotiation skills as part of the core curriculum in each level of PME. Add an eight-hour module on practical negotiating essentials with a role-playing exercise to the required coursework for all new general officers.

Current Status. SOS and Air Force IDE and SDE currently include basic negotiation skills. Since this is a recent development (within the past five years), many general officers may not have received this instruction.

Discussion. The Senior Leader Orientation Course or other orientation opportunities for new general officers should include an eight-hour module on practical negotiating skills. Senior leaders absolutely need negotiation skills to be successful, especially as they represent the Air Force to other services, other agencies, and other militaries. The appendix provides more information on the courses offered by the Air Force Negotiation Center of Excellence.

Recommendation 3: The Air Force should develop an executive preflight seminar to assist officers transferring to O-8 assignments.

Current Status. General officers usually have no overlap with their predecessors, thus creating a steep learning curve upon their arrival at a new position, especially if they have no experience in that career field. Major generals are most likely to find themselves in need of additional preparation for new positions, given the nature of the assignment process for general officers.

Discussion. The Navy offers an “on-boarding” course for flag officers assigned to new positions, with instruction from subject-matter experts. The course is tailored to fit the needs of the officer, with input from the incumbent. The Navy has offered 20 such courses in the past 18 months at the Naval Postgraduate School.² The Air Force should develop a similar course to improve professional development for its mid-level general officers.

Recommendation 4: The Air Force should provide each general officer with a 360-degree leadership assessment and the on-call services of an executive coach.

Current Status. While many general officers receive a 360-degree assessment while attending SDE or courses at the CCL, it is not guaranteed that they do so. Feedback from CCL attendees indicates that the assessment is vital to personal growth and the development of self-awareness.³

Discussion. The Navy offers a 360-degree assessment and on-call executive coaching to flag officers attending its executive development programs. These are essential services for senior leaders who wish to continue to refine their leadership skills with professional and confidential support.⁴

Experience

Recommendation 5: Developmental teams and commanders should plan career-broadening assignments to facilitate cross-domain development for officers.

Current Status. Since it is a new concept, cross-domain development is not currently part of official Air Force personnel and assignment policy. Some officers may be participating already in cross-domain development as a result of personal initiative or special assignment circumstances.

Discussion. Force development officials must develop a concept of operations for cross-domain development to include timing, selection criteria, training curricula, inclusion of concepts in core PME coursework, and decisions on how development teams will handle officers who have moved to their second domain.

Recommendation 6: Developmental teams should strive to vector Air Force officers toward two joint tours during their careers. The first should occur after promotion to major and completion of IDE.

Current Status. Officers must complete joint professional military education (JPME) I before being assigned to a joint tour. Completion of JPME I generally occurs in conjunction

with IDE, and completion of JPME II generally occurs in conjunction with SDE.

Discussion. For officers to build joint credibility, two joint tours are desirable. Officers will learn how joint organizations operate and develop a useful network of joint colleagues. Officers can then be prepared for joint assignments as new flag officers and greatly increase their probability of being selected for more senior joint positions.

Recommendation 7: The Air Force should review key colonel billets and officially designate wing commander-equivalent positions that have a comparable span of control, diversity, authority, and accountability.

Current Status. Wing command is universally viewed as the litmus test for increased rank and responsibility. Incumbents generally remain as wing commanders through at least one inspection cycle.

Discussion. As the Air Force shrinks, fewer wings and fewer wing command opportunities will be available. Designating wing commander-equivalent positions would give more officers recognition for performing in key positions of responsibility and provide more diversity of experience for potential general officers.

Recommendation 8: Promotion boards should formally identify and track high-potential officers upon selection to major and attendance at IDE in-residence, and each promotion board through selection for brigadier general should review the year group to add or subtract designees.

Current Status. Officers achieve de facto high-potential designation through selection for certain high-visibility assignments, in-residence PME, schools such as SAASS, and below-the-zone promotions. Awareness and management of the high-potential officers is usually limited to senior commanders and the developmental teams.

Discussion. Identification of high-potential individuals is a common corporate business practice. Specifying high-potential officers upon their selection for major and in-residence IDE provides a manageable number for additional board review and hi-po designation. Pointing out high-potential officers and flag-

ging them as such in the personnel system facilitate a more effective distribution of development opportunities across the development teams. The hi-po designation also provides more continuity in personnel management for officers who leave their “home” developmental teams for joint, interagency, cross-domain, and other assignments across the stovepipes.

Recommendation 9: The Air Force should develop opportunities to ensure that high-potential officers can acquire an experiential and a training foundation in at least two of the three operational domains.

Current Status. Since cross-domain development is a new concept, it is not part of official Air Force personnel and assignment policy.

Discussion. To produce general officers with meaningful cross-domain experience (i.e., at least one year’s immersion in a second domain), Air Force assignment policy must support cross-domain assignments for field-grade officers officially designated as high potential.

Recommendation 10: The Air Force should develop an online professional forum for new brigadier generals, similar to the Commanders Connection for squadron commanders sponsored by Air University from 2006 to 2011.

Current Status. An official online professional forum for new brigadier generals does not exist at this time.

Discussion. The Commanders Connection (<https://forums.af.edu/sqcc>) was very popular with squadron commanders and was used to support an update of AU-2, *Guidelines for Command*, the squadron commander’s handbook published by AU Press. Membership in the Commanders Connection was voluntary and was limited to current, selected, or former squadron commanders who were fewer than two years out of their commands. Participation in the Commanders Connection allowed members to share their problems, challenges, and lessons learned in a trusted environment with the goal of saving time and advancing the practice of command. Developing a similar voluntary professional forum for new brigadier generals could achieve similar benefits for the officers involved. In addi-

tion, giving senior officers more experience in social networking would enhance their understanding of junior Air Force members' involvement with these electronic tools.

Recommendation 11: The Air Force should develop an Air Force Fellows flag program, an education opportunity for major generals to be exposed to innovative ideas and successful strategic leaders at the highest levels in both the military and in industry.

Current Status. While short courses listed in the *Senior Leader Development Program Portfolio* are available to major generals, an additional need exists for development opportunities at the strategic level for those officers in the select pool of two-star generals who might lead the Air Force.

Discussion. Under the proposed program guidelines, approximately 10 major generals would be selected for the program each year. Each O-8 selected would be assigned a four-star-general mentor, who would identify a potential problem. The major general would serve a sabbatical tour at an innovative organization (industry, military, or academic), working for an acknowledged strategic leader, developing a feasible solution to the assigned problem, and then briefing his or her proposed solution to the mentor. Ideally, this sabbatical would take place between assignments and give the major general time to think about strategic-level issues and get new perspectives from industry leaders as well as the four-star mentor. The program could be managed by the AFRI Air Force Fellows Office. (Note: There were 104 major generals and 41 lieutenant generals at the end of FY 10.)⁵

Education

Recommendation 12: The Air Force should increase opportunities for officers to study topics related to national security strategy at civilian institutions.⁶

Current Status. Air Force Fellows' assignments are divided between think tanks, industry, government, and academia,

with approximately 21 percent assigned to civilian academic institutions.⁷

Discussion. Sending more Fellows to academic assignments would give more officers the opportunity to study topics related to national security strategy in civilian degree-granting institutions. The April 2010 HASC report on PME noted that PME does not fully develop strategists and recommended that the services sponsor more junior officers to civilian institutions for master's and doctoral studies in strategy-related disciplines.⁸

Recommendation 13: The Air Force should send high-potential officers at the O-5/O-6 level to an Air Force strategic planning seminar (a 10-day executive education course to be developed focusing on strategic planning).

Current Status. PME, a few short professional continuing education courses, and some AFSO21 courses include lessons on strategy development and operational planning. However, formal instruction on developing mission and vision statements, organization objectives, and metrics is not commonly available.

Discussion. Senior officers frequently find themselves required to lead strategic planning efforts for their organizations when they assume a new command, face changes in mission, or must reorganize because of budget or personnel cuts. In many cases, outside consultants are hired to facilitate these efforts. Rather than relying on outside experts, the Air Force should build strategic planning expertise within the high-potential officer corps. The recommended focus for this new course would be strategic planning, goal setting, risk management, financial management, and an ethics refresher, with an emphasis on leading large, complex organizations. The course organizers (potentially located at Air University) could recruit subject-matter experts from across Air Force academic institutions (Air Force Academy and Air University). The Navy offers a similar course for its high-potential officers.⁹

Recommendation 14: The Air Force should encourage officers to write and publish articles on military and national security issues, especially after completion of senior developmental education.

Current Status. Improving critical-thinking skills is a prerequisite for lifelong learning. For senior leaders, the formal task of writing articles is an excellent method to generate and examine ideas.

Discussion. Although there are numerous journals and military-related publications, the number of articles written by active-duty Air Force senior officers remains relatively low. The highest levels of Air Force leadership should seriously consider encouraging senior leaders to write articles on issues relevant to current Air Force challenges.

Recommendation 15: The Air Force should encourage commanders, as part of their mentoring efforts, to develop their own reading programs based upon the CSAF reading list and to discuss these books with their junior officers.

Current Status. Each year the chief of staff publishes a recommended reading list for Air Force members.¹⁰

Discussion. Senior officers and commanders could demonstrate to their juniors their personal commitment to lifelong learning and reading by including discussions of some of the recommended books in their mentoring sessions, commander's calls, or other local leadership activities. These discussions must encourage critical thinking and stretch beyond the inbox.

Notes

1. AF/DPG, General Officer Management Office, <https://www.my.af.mil/gcss-af/USAF/ep/globalTab.do?channelPageId=s6925EC13371A0FB5E044080020E329A9>.

2. Navy Executive Development Program staff, interview by the authors, 13 June 2011.

3. Center for Creative Leadership staff, interview by the authors, 16 March 2011.

4. Navy Executive Development Program staff, interview.

5. "The Air Force in Facts and Figures, *Air Force Magazine* 94, no. 5 (May 2011): 41.

6. House Armed Services Committee Report, "Civilian Graduate Schools," April 2010.
7. Air Force Fellows Office (AFRI/RIPF), "Academic Year 2011 Air Force Fellowship Locations," slide, 30 June 2011.
8. HASC Report, "Civilian Graduate Schools."
9. US Navy, "Navy Senior Leader Seminar," http://ned.nps.navy.mil/home/pages/course_description_nsls.php.
10. US Air Force, "CSAF Professional Reading Program," <http://www.af.mil/information/csafreading/index>.

Chapter 5

Conclusions

The US Air Force faces an array of future challenges, not the least of which is the recognition of those characteristics desired for successful senior leaders over the next generation. The starting point for this discussion of desired leadership characteristics was an analysis of the projected future environment. This study then reviewed current Air Force officer development and made recommendations to cultivate specific desired characteristics.

The Future Strategic Environment

The next generation of Air Force leaders must expect to deal with a strategic environment characterized by volatility, uncertainty, complexity, and ambiguity—VUCA. Spiraling civil unrest, humanitarian crises, and the impact of instant communications and networking tools will combine to create unpredictable, volatile circumstances. The AFRI research team believes that in many future instances the US government will need the Air Force to provide strategic solutions to problems currently unknown. Air Force leaders using off-the-shelf solutions will have difficulty succeeding in this increasingly intense environment.

Certainly, the image of the National Security Council watching a real-time video feed of Osama bin Laden's assassination provides an indication of the kinds of decision making likely to become routine. Decision makers will encounter large amounts of raw, unfiltered, and sometimes conflicting data in multiple formats. As technology continues to shorten the decision cycle, senior leaders will find themselves in situations where quick thinking is needed with little time for in-depth data analysis.

Uncertainty or unknown circumstances mean that Air Force leaders may find many of their most cherished assumptions at risk. Nonstate actors now have access to weapons previously limited to nation-states. Multinational corporations have resources greater than some nation-states. The proliferation of

technology and the diminishing fiscal and population resources of the United States and its primary allies mean that the United States can no longer depend upon its status as the lone super-power to solve most problems.

Air Force leaders will find that complexity, or a set of complicated relationships and decision factors, will challenge their abilities to model the strategic environment. It will be difficult to predict the branches and sequels of any potential course of action. Key actors are no longer limited to nation-states; changing technologies, environmental conditions, resource shortages, and the rising expectations of the previously disenfranchised will combine to make strategic planning and decision making challenging indeed.

Ambiguity or vagueness about the current situation and resulting outcomes will force Air Force leaders to operate and make decisions in equivocal environments. The development and spread of technology will make it increasingly difficult to identify those responsible for harmful or negative acts. Another source of ambiguity is the lack of a national consensus in describing the United States' vital interests and its role in the international system and, accordingly, how the Air Force would support that role.

Describing Future Leaders

After defining potential future challenges for Air Force leaders, the AFRI study team reviewed leadership development both in and out of the Air Force. Analyzing academic, practitioner, and military perspectives on leadership enabled the study team to generate a set of characteristics for future senior leaders. This analysis aligned the characteristics into cognitive, interpersonal, and leadership-style categories.

The Air Force will require visionary senior leaders to deal with the VUCA environments. The Air Force must envision desirable future organizations, share those visions while gaining input from their teams, and guide the implementation. Senior leaders must quickly sift through large amounts of data and make swift, confident decisions; they must step back and view problems with a flexible perspective; they must be broadly knowledgeable and experienced; and they must be emotionally

resilient and aware of their own strengths and weaknesses. These competencies are intellectually grounded by the leaders' dedication to lifelong learning.

The willingness of senior leaders to learn supports their commitment to team building and networking. They are always interested in learning from others. Across the broad range of organizations with whom senior leaders work, they constantly serve as facilitators and negotiators. Senior leaders must become politically savvy through a variety of assignments that expose them to other services as well as to joint, federal, and international organizations. From their experiences and education, senior leaders become sensitive to the various organizations' cultural norms as they meld them into functional alliances. Senior leaders must remain sensitive to their people's emotional concerns and be ready to provide the needed resiliency resources.

Successful leaders already live the Air Force's basic leadership characteristics, including its core values. As these leaders reach senior rank, they continue to refine their strategic communication skills, emphasizing information sharing and open dialogue. These leaders take a creative approach to developing the next generation of senior leaders through mentoring and guiding their juniors. Senior leaders must maintain an enterprise perspective when making tough decisions on resource allocations and must link these decisions back to their organizations' and teams' strategic visions.

Final Thoughts

If the US Air Force is to accomplish its mission over the next generation, it must consistently focus significant attention on developing its most critical asset: its leaders. Developing officers who can lead successfully in a volatile, unpredictable, resource-constrained environment will prove to be a greater challenge than the acquisition of any single weapon system. The Air Force must produce leaders who have the cognitive, interpersonal, and personal qualities needed to lead a dynamic and constantly evolving organization. While the present officer-development approach has proven successful, the margin for error is narrowing as challenges increase in breadth, depth,

and character. Thus, improving the process by which the Air Force selects, trains, and educates its leaders will play a critical role in enabling the service to effectively defend the nation's interests. In continuing to focus on the growth and evolution of successful leaders, the USAF continues to demonstrate its absolute commitment to the Airman's Creed, "I am an American Airman: Wingman, Leader, Warrior."

Appendix

Air Force Negotiation Center of Excellence

**Concept Paper for General Officer
Negotiation Skills**

BACKGROUNDER



Air Force Negotiation Center of Excellence (NCE) Concept Paper for General Officer Negotiation Skills



NCE mission: Design/deliver culturally adaptable education, training, and research in negotiation methods and techniques that fosters collaborative relationships, builds partnerships, and finds interagency solutions.

NCE Staff: *Dr Stefan Eisen, Col (ret) USAF, Director. Mr. Hank Finn and Mr. David O'Meara, Deputy Directors*

Current NCE Capabilities/Programs: The NCE supports a full array of negotiating training and education from Master's level electives and core instruction at Air Force IDE and SDE to custom tailored seminars for audiences such as DOD Chaplains Course, DOD Comptrollers Course, AFSOC senior staff, AF Special Operations School, AF civilian supervisor's course, 17AF Staff (active duty and the Reserve unit at Battle Creek), Squadron Officers School, Air Force Chief's Course, Air Advisor Course (Ft Dix), FOPAC, Pentagon A5 staff, Civil Air Patrol Wing Commander's Course, US Navy Maritime Civil Affairs and Security Training Course (MCAST), SAF/ESL professional development program, SAF/IA staff, SAF/GCD Negotiation and Alternative Dispute Resolution Course, and the SAF/GCD General Counsel Orientation Course.

Program content includes NCE researched and written materials that specifically address negotiating in the military context as well as simulations and exercises to apply negotiating skills in both a culture neutral and cross-cultural environments. Products include:

- a. NPSC survey (CD-ROM based simulation, one of nine on the disc)
- b. "Warrior/Negotiator: No Longer an Oxymoron, But a Necessity" (primer published in October 2009)
- c. "Overview of Negotiating Strategies" (short primer published in May 2011)
- d. Mission to Bega: CD based cross-cultural decision making simulation
- e. Pentagon Peer-plexer: two party, culture neutral simulation



BACKGROUND



Air Force Negotiation Center of Excellence (NCE) Concept Paper for General Officer Negotiation Skills



- f. Torbango: two party, cross-cultural simulation (African culture)
- g. Bannauue: two-party, multi-cultural simulation (Philippine culture)
- h. Bengalia cross-cultural, multi-party negotiating simulation (South Asian culture)
- i. YBRBr cross-cultural, multiparty simulation (Europe/Serbia, USSR, US cultures)

Current contribution of the NCE to the Flag Officer Pre-Deployment Acculturation Program (FOPAC): NCE, in collaboration with the Cross Cultural Competency Department (3C) of the Air Force Culture and Language Center (AFCLC) provides a multi-hour seminar on cross-cultural negotiations, tailored to the deploying flag officer's destination. The NCE also provides input and serves as a "game controller" for end of course simulations.

Recommendations for General Officer negotiations coursework (8-hour course curriculum): The basis for this recommendation is two-fold. First is the ever-increasing reality that a senior leader's span of control is not as great as their span of responsibility. In short, today's senior leaders are charged with mission success working with people they have no direct authority over (host nation, coalition, government representatives, NGOs, to name a few). This requires leaders to have the ability to *influence* as much as *direct*. The art of influencing is a negotiating skill set that first overcomes innate cross-cultural conflict (challenges presented by differences in worldviews, etc.) and then addresses the issue to be resolved using effective cross-cultural negotiating strategies. Second, NCE research suggests that senior leaders have a very well developed negotiating strategy. In NCE terms, senior leaders are competent at the "Insist" negotiating strategy. Over two thirds of Lt Cols and above (from a cross section of DOD leaders attending SDE) indicate they prefer the Insist strategy. The NCE suggests that although this strategy is needed as a senior leader, it is not sufficient to succeed as a senior leader. The NCE suggests there are at least five major negotiating strategies (Insist, Evade, Comply, Settle and



BACKGROUNDER



Air Force Negotiation Center of Excellence (NCE) Concept Paper for General Officer Negotiation Skills



Cooperate) and that senior leaders should be able to use these strategies as conditions warrant. Of note, almost all of the International officers in SDE, when commenting on the five strategies, indicate they prefer the Cooperate strategy and find that dealing with US senior leaders can often present a challenge because of the apparent differences in approaches and techniques.

Location for this course is flexible, but the preferred location may be at Maxwell AFB since most of the teaching assets and SMEs serve at Air University.

The below proposes a short course (potentially part of the SLOC) that addresses the concepts described above:

<u>Topic</u>	<u>Time (hours)</u>
a. Seminar: Introductory survey and analysis	1.0
b. Seminar: Negotiating in the military context	1.5
c. Simulation: Culture neutral simulation	2.0
d. Seminar: Cross-cultural negotiation dynamics	1.5
e. Simulation: Cross-cultural negotiations simulation	<u>2.0</u>
	8.0

Seminars would consist of presentations and discussions of conflict management, decision-making processes, the considerations of Trust, Information, Power and Options (TI2P2O model), varying approaches to negotiations using the Negotiation Preferences and Strategies Chart (NPSC), and cross-cultural negotiations cues and clues.

The culture neutral simulation would be played with a faculty as the negotiating opposite. For best learning effect, the cross-cultural simulation would have a culturally appropriate role player, interpreters (DLI Students might be a source) and faculty would serve as game controllers/mentors.

Point of Contact: <http://negotiation.au.af.mil>, or Dr Stefan Eisen
(Stefan.Eisen@maxwell.af.mil)



Abbreviations and Acronyms

AF/A1D	Directorate of Force Development
AF/DPG	General Officer Management Office
AFPC	Air Force Personnel Center
AFRI	Air Force Research Institute
AFSLMO	Air Force Senior Leader Management Office
AFSO21	Air Force Smart Operations in the 21st Century
BG	brigadier general
CCL	Center for Creative Leadership
CSAF	chief of staff of the Air Force
CY	calendar year
DAL	Developing of Aerospace Leaders
DG	distinguished graduate
DP	definitely promote
DT	developmental team
FOPAC	Flag Officer Pre-Deployment Acculturation Program
GO	general officer
HASC	House Armed Services Committee
ICL	institutional competency list
IDE	intermediate developmental education
JPME	joint professional military education
MAJCOM	major command
MBA	master of business administration
NCE	Negotiation Center of Excellence
NDU	National Defense University
P	promote
PME	professional military education
PRF	promotion recommendation form
SDE	senior developmental education
SLOC	Senior Leader Orientation Course
SOS	Squadron Officer School
USAF	United States Air Force
VUCA	volatility, uncertainty, complexity, and ambiguity

Research Feedback

Air University is working hard to keep its research focused on interests important to the Air Force and to the nation. After you have read the research paper, please give us your frank opinion on the contents. All comments, large and small, complimentary or caustic, will be appreciated.

AFRI/DE
Dean, Air Force Research Institute
155 N. Twining St., Bldg 693
Maxwell AFB AL 36112-6026

Title of Paper: Air Force Leadership Study: The Need for Deliberate Development

Authors: Karen Currie, John Conway, Scott Johnson, Brian Landry, Adam Lowther

Please use the scale below to answer these important questions:				
1. Fail	2. Poor	3. Fair	4. Good	5. Excellent
1. Is the subject matter relevant to the Air Force?		1 2 3 4 5		
2. How would you rate the readability of this paper?		1 2 3 4 5		
3. How useful is this research to you and your organization?		1 2 3 4 5		

Or note comments:

Thank you for your assistance.

FOLD HERE

Place
Stamp
Here

AFRI/DE
Dean, Air Force Research Institute
155 N. Twining St., Bldg 693
Maxwell AFB AL 36112-6026

Air Force Leadership Study
The Need for Deliberate Development

Commander and President, Air University
Lt Gen David S. Fadok

Director, Air Force Research Institute
Gen John Shaud, USAF, Retired, PhD

Air University Press Team

Chief Editor
Dr. Richard Bailey

Copy Editor
Tammi Long

Cover Art and Book Design
Daniel Armstrong

*Composition and
Prepress Production*
Ann Bailey

*Print Preparation and
Distribution*
Diane Clark